

CLAIMS:

1. An AV device system comprising a plurality of input devices for generating an input AV signal, a related device for recording and reproducing said AV signal, a display device for displaying said AV signal, and a bus connecting said input devices, said related device and said display device for transmitting or receiving the AV signal and the management information,

wherein said related device includes a recording medium for recording the AV signal, and said input devices each include means for transmitting the information requesting said related device to secure a recording area in the recording medium of said related device.

2. An AV device system according to Claim 1, wherein said input devices each include means for receiving the information from said related device through said bus as to whether a recording area can be secured.

3. An AV device system according to Claim 2, wherein said input devices each include means for receiving the information on the recording area secured on the recording medium of a related device, said information being transmitted from said related device to said input devices through said bus in response to said request issued to said related device for securing a recording area.

4. An AV device system according to Claim 3, wherein said input devices each include means for

recording the information on the recording area of the recording medium of said related device.

5. An AV device system according to Claim 4, wherein said input devices each include means for transmitting to said related device through said bus the recording execution information for recording said AV information in said secured recording area at a desired time, in the case where said related device is capable of securing said recording area.

6. An AV device system according to Claim 5, wherein said related device includes means for transmitting to said display device the information as to whether said recording area can be secured or not, and said display device displays the information as to whether said recording area can be secured or not.

7. An AV device system according to Claim 6, wherein said input devices each include means for transmitting to said related device through said bus the information requesting the transmission of the information indicating the reason why the recording area cannot be secured in the case where said related device cannot secure the recording area.

8. An AV device system according to Claim 7, wherein said input devices each includes means for receiving from said related device the information indicating the reason why said recording area cannot be secured.

9. An AV device system according to Claim 8,

wherein said related device includes means for transmitting to the display means the information indicating the reason why said recording area cannot be secured, said display means displaying the information indicating the reason why said recording area cannot be secured.

10. An AV device system according to Claim 7, wherein said input devices each include means for determining whether another device is to be selected upon receipt of the information indicating that said recording area cannot be secured.

11. An AV device system according to Claim 7, wherein said input devices each include means for notifying that the recording medium mounted in said related device is changed upon receipt of the information that said recording area cannot be secured.

12. An AV device system comprising a plurality of input devices for generating an input AV signal, a related device for recording and reproducing said AV signal, a display device for displaying said AV signal, and a bus connecting said input devices, said related device and said display device to each other for transmitting or receiving the AV signal and the management information,

wherein said related device includes a recording medium for recording and reproducing the AV signal and means for determining whether it is possible or not to secure the recording area indicated in the information requesting to secure a desired recording area on said

recording medium, said information being transmitted from said input devices through said bus.

13. An AV device system according to Claim 12, wherein said related device includes means for transmitting the information on said secured recording area to said input devices through said bus in the case where said desired recording area can be secured.

14. An AV device system according to Claim 13, wherein said related device includes means for receiving from said input devices through said bus the record execution information for recording said AV information in said secured recording area at a desired time.

15. An AV device system according to Claim 14, wherein said related device includes means for storing said record execution information.

16. An AV device system according to Claim 12, wherein said related device includes means for transmitting to said input devices through said bus the information indicating that said desired recording area cannot be secured, in the case where said desired recording area cannot be secured.

17. An AV device system according to Claim 16, wherein said means for transmitting the information indicating that said recording area cannot be secured is means for transmitting to said input devices the information indicating that said recording area cannot be secured and the information indicating the reason why said recording area cannot be secured.

18. In an AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing the AV signal, a display device for displaying the AV signal, and a bus interconnecting said input devices, said related device and said display device for transmitting and receiving an AV signal and management information,

a method of using said AV devices, comprising the steps of causing said input devices to request said related device through said bus to determine whether the AV signal can be recorded in the recording medium of said related device at a desired time, and causing said input devices to receive the result of said determination from said related device through said bus.

19. In an AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing the AV signal, a display device for displaying the AV signal, and a bus interconnecting said input devices, said related device and said display device for transmitting and receiving the AV signal and management information,

a method of using said AV devices, comprising the steps of causing said input devices to receive through said bus from said related device a request to determine whether the AV signal can be recorded in the recording medium of said related device at a desired

time, causing said input devices to determine whether said determination request can be executed or not, and causing said input devices to transmit said determination result to said related device through said bus.

20. An AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing the AV signal, a display device for displaying the AV signal, and a bus interconnecting said input devices, said related device and said display device for transmitting and receiving the AV signal and management information,

wherein said input devices request said related device through said bus to determine whether the AV signal can be recorded in the recording medium of said related device at a desired time, and said input devices receive the result of said determination from said related device through said bus.

21. An AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing said AV signal, a display device for displaying said AV signal, and a bus interconnecting said input devices, said related device and said display device for transmitting and receiving the AV signal and management information,

wherein said input devices each receive from said related device a request to determine whether the AV

signal can be recorded in the recording medium of said related device at a desired time, and said input devices determine whether said determination request can be executed or not, and transmits the result of said determination to said related device through said bus.

22. An AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing said AV signal, a display device for displaying said AV signal, and a bus interconnecting said input devices, said related device and said display device for transmitting and receiving the AV signal and management information,

wherein said input devices include means for setting the information requesting said related device to record the AV signal and means for checking with said related device whether the AV signal indicated in said information can be recorded or not, and in the case where the recording medium is not mounted in said related device, the information indicating that the recording medium is not mounted is displayed on said display device.

23. In an AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing the AV signal, a display device for displaying the AV signal, and a bus interconnecting said input devices, said related device and said display

device for transmitting and receiving the AV signal and management information,

a method of using said AV devices, comprising the steps of causing said input devices to set the information requesting said related device to record the AV signal and check with said related device through said bus whether the recording indicated in the information is possible, and in the case where the recording medium is not mounted in said related device, causing the display device to display the information that the recording medium is not mounted.

24. In an AV device system comprising a plurality of input devices for generating an input AV signal, a related device having a recording medium for recording and reproducing the AV signal, a display device for displaying the AV signal, and a bus interconnecting said input devices, said related device and said display device for transmitting and receiving the AV signal and management information,

a method of using said AV devices, comprising the steps of storing the recording execution information for the input devices in a related device for recording the AV signal based on said recording execution information, and causing a related device other than said first related device having said execution information stored therein to access selected one of the input devices and said first related device through a bus and grasp the operation of the devices based on said recording



execution information.

25. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for issuing a request to at least one other device through said bus to acquire the operating condition of the time management section and the current time, and means for receiving the information indicating the operating condition of said time management section.

26. A device system for managing time and information according to Claim 25, wherein each of said devices includes means for storing the information indicating the operating condition of said time management section.

27. A device system for managing time and information according to Claim 26, wherein each of said devices includes means for changing the contents of the information indicating the operating condition of said time management section stored in said storage means.

28. A device system for managing time and information according to Claim 25, wherein each of said devices includes means for displaying the information indicating the operating condition of said time management section on said display section.

29. A device system for managing time and informa-

tion according to Claim 25, wherein each of said devices includes means for accessing the information indicating the operating condition of said time management section received from at least one other device through said bus and determining whether the time management section of said other device is operating normally or whether the accuracy of the current time is within a predetermined tolerance.

30. A device system for managing time and information according to Claim 29, wherein the result of said determination is displayed on said display section.

31. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for issuing a request to at least one other device through said bus to set the current time and the operating condition of the time management section including the operating condition of said time management section.

32. A device system according to Claim 31, wherein each of said devices includes means for storing the information indicating the status of said time management section.

33. A device system according to Claim 32, wherein each of said devices includes means for changing the

contents of the information indicating the status of the time management section stored.

34. A device system according to Claim 32, further comprising means for receiving the result as to whether the information indicating the status of said time management section is set or not.

35. A device system according to Claim 34, wherein in the case where the result as to whether the information indicating the status of said time management section is set or not is received, said result is displayed on said display section.

36. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for issuing a request to at least one other device through said bus to acquire the information indicating the status of said time management section including the current time and the operating condition of the time management section, means for receiving said information indicating the status of said time management section in response to said acquisition request, and means for issuing a request to the other devices to set the information indicating the status of the time management section.

37. A device system according to Claim 36, wherein

each of said devices includes means for displaying on said display section the information indicating the status of said time management section received through said bus.

38. A device system according to Claim 37, wherein each of said devices includes means for storing the information indicating the status of said time management section.

39. A device system according to Claim 36, wherein each of said devices includes means for accessing the information indicating the status of said time management section received from at least one other device and determining whether the time management section of said other device is operating normally or whether or not the accuracy of the current time is within a predetermined tolerance.

40. A device system according to Claim 39, wherein each of said devices includes means for displaying the result of said determination on said display section.

41. A device system according to Claim 36, wherein each of said devices includes means for displaying on said display section the result, if received, as to whether the information indicating the status of said time management section is set or not.

42. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least

one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for transmitting the information indicating the status of said time management section in response to a request from at least one other device to acquire the information indicating the status of said time management section through said bus.

43. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for setting the status of said time management section in response to a request from at least one other device to set the status of said time management section through said bus.

44. A device system according to Claim 43, wherein each of said devices includes means for storing the information indicating the status of said time management section set in the above-mentioned manner.

45. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices

for displaying said information signal,

wherein each of said devices includes means for storing the time acquisition device data constituting the data for at least one other device in order to acquire through said bus the time of the time management section providing a reference.

46. A device system according to Claim 45, further comprising means for changing said time acquisition device data.

47. A device system according to Claim 45, wherein each of said devices includes means for displaying said time acquisition device data on the display section.

48. A device system according to Claim 45, wherein each of said devices includes means for issuing to at least one other device a request to acquire said time acquisition device data through said bus, and means for receiving said data.

49. A device system according to Claim 48, further comprising means for displaying on the display section said time acquisition device data received through said bus.

50. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for

acquiring accurate time and means for storing the master time information providing the data indicating the availability of said acquisition means.

51. A device system according to Claim 50, further comprising means for holding said accurate time acquired.

52. A device system according to Claim 51, wherein each of said devices includes means for storing the information on the timing of acquiring the accurate time.

53. A device system according to Claim 51, wherein each of said devices includes means for issuing a request to at least one other device to acquire said master time information and means for receiving the result of said acquisition request through said bus.

54. A device system according to Claim 53, wherein each of said devices includes means for acquiring the time from said other device in the case where said other device is found to have accurate time acquisition means upon receipt of the response to said acquisition request through said bus, and adjusting the time of the time management section with said accurate time as a reference time.

55. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

wherein each of said devices includes means for

storing the data indicating the lack of the means for acquiring accurate time from a source external to said system.

56. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

further comprising at least a device including means for requesting said at least one other device to acquire the information indicating the status of the time management section including the operating condition of the time management section and the current time and means for receiving the information indicating the status of said time management section, and at least a device including means for responding to a request from at least one other device to acquire the information on the status of the time management section through said bus, wherein the status of the time management section can be grasped between said devices existing on the bus.

57. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

further comprising at least a device including



means for requesting at least one other device to adjust the time management section through said bus, and at least a device including means for adjusting the time management section in response to the request from at least one other device through said bus,

wherein the time management section can be adjusted between the devices existing on said bus.

58. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by a bus to said devices for displaying said information signal,

further comprising at least a device including means for acquiring and holding accurate time from an external source and at least one other device including means for acquiring the time from said device having said holding means through said bus and adjusting the time management section,

wherein all the devices existing on said bus can hold accurate time.

59. A device system comprising a plurality of devices for generating and recording and reproducing information and including a time management section for managing the time of the information signal and at least one display section connected by an IEEE1394 serial bus to said devices for displaying said information signal,

further comprising at least a device including

means for storing the data indicating whether means for acquiring accurate time is available, means for issuing a request to at least one other device to acquire said data through said bus, means for receiving said data, and

at least one other device including means for storing the data indicating whether means for acquiring accurate time is available and means for responding to said request from said other device to acquire said data,

wherein said at least one other device having means for acquiring accurate time can be extracted at the time of resetting the bus.

60. A device system according to Claim 59, further comprising means for determining, from among said at least one device extracted, said other device for holding a reference time on said bus.

61. A device system according to Claim 60, further comprising means for storing the data on said other device determined for holding the reference time on said bus.

62. A device system according to Claim 61, wherein each of said devices includes means for reading said stored data, wherein the time is acquired and adjusted from said other device indicated in said data read.